Rosa gigantea

Singularly Beautiful Roses

A Publication Dedicated to Single, Nearly Single, and Semi-Double Flowered Roses
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Bonus Edition!

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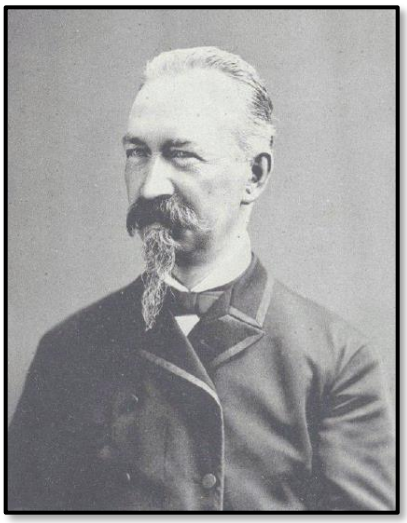
A Great Taxonomist and The World's Largest Rose:
A Magical Interaction and What Follows Thereafter

by Girija & Viru Viraghavan



François Crépin

One of the most dramatic periods in rose taxonomy began on June 2, 1888 when Monsieur François Crépin (1830-1903), the leading rose taxonomist of his time, received a parcel from Mr. David Prain, conservator of the Sibpur Botanical Garden, near Calcutta, India. The parcel contained specimens of a new rose species collected by General Sir Henry Collett of the British Indian Army in the Shan Hills of Upper Burma (Myanmar). In the accompanying letter Mr. Prain elaborated that Gen. Collett had described this rose species "as a magnificent species, sprawling over rocks and climbing into trees and having a pure white flower, 5 inches in diameter."

M. Crépin concluded that the rose in question was unpublished and appeared to constitute a distinct species. In the *Royal Belgian Society of Botany Bulletin*, he provisionally described it as *Species - Rosa gigantea, Collett*, and further concluded that, "in my opinion, it should be classified as being closely related to *Rosa indica*" and that it belonged in the section he himself had named *Indicae* ('Description of a New Asiatic Rose,' *Session of the Royal Belgian Society of Botany Bulletin*, Vol. XXVII, July 2, 1882). We may add that M. Crépin was not only a great taxonomist, but unlike many of his tribe, he looked beyond taxonomy when he stated, "whatever the case, General Collett's discovery is worth bringing to the attention of scientists and rose fanciers (amateurs). If anyone succeeds in introducing Gigantea into Europe and in growing it, it will enrich choice collections by its enormous corolla and beautiful foliage; moreover, it will be, by crossing it with other species, the source of hybrid products, probably superior to those of *Rosa indica*."

Henry Collett

Sometime thereafter, M. Crépin indicated in the January 12, 1889 edition of the *Royal Belgian Society of Botany Bulletin*, that he had been able to examine some new materials that allowed him to expand his earlier description of *Rosa gigantea* Collett. In the article Crépin noted he had received a letter from Gen. Collett that specified that he had found *R. gigantea* growing near the villages of the Myelet District (in the Shan Hills of Burma/modern day Myanmar) at the latitude of N.20.40, longitude E.96.13, and at an altitude of between 4000 and 5000 feet (1200-1500m). Further, the rose was observed in fourteen or fifteen different places in the district. An important observation made

by the general was that *R. gigantea* grew where frosts were almost unknown, and that, at least in central Europe, it should be grown protected from winter frost, indeed, well sheltered. The general also, in response to a query from M. Crépin, further clarified that the stems had prickles and that the inflorescences were uniflorous, but that he was unable to confirm that this was always the case.

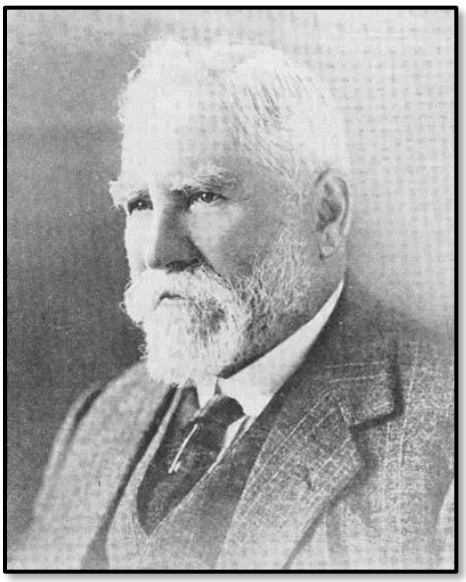
Previously, a form of *R. gigantea* had been found by Sir George Watt, of which six specimens had been sent to M. Crépin from the Berlin Botanical Museum. These had been collected in Khonghui on Mount Sirohi in April, 1882 in what is now Manipur State in northeast India, at an altitude of 6000 feet (1800m). Shortly thereafter, Crépin contacted the Kew Herbarium, London, and was informed that Kew's collections included two herbarium sheets of the same rose, one labelled April 17, 1882 at Khonghui and the other labelled April 11, 1882 at Sirohfurar, at 6000 feet. Watt suggested the name *Rosa macrocarpa* (with "large fruit"). One of the inflorescences from Khonghui was triflorous, the others uniflorous. The Sirohifurar specimens were all uniflorous.

Crépin agreed that the name *macrocarpa* was perhaps justified by the species' fruit size and he got confirmation from Mr. George King, the director of the Calcutta Botanic Garden, who had sent him two mature *R. gigantea* fruits which were big, pyriform, about as wide as long, 23-24mm. Crépin's observation that Watt's discovery considerably widens *R. gigantea's* dispersion area from a location 5° north from Burma's Shan Hills to the west, in India. Crépin adds that perhaps this "remarkable" species spreads east to south in western Chinese provinces.

When we explored the same area in Manipur in January, 1991, it was peak winter. We reached the same spot as George Watt may have done, after driving in a jeep up a forest road to some distance, and then trekking further, reaching the spot at mid-day, but it was clearly a much colder location than the ones in the Shan Hills Burma, as accumulated frost had hardened to blocks of ice. We saw specimens of the species clambering the forest trees well over fifteen meters high and supported by the tree trunks.

The question which arises is whether the two collections of *R. gigantea* in Upper Burma and in northeast India are the same species or are they genetically different? It is pertinent to note that the Shan Hills are geologically considered to be an extension of the Himalayan range. If we bear this in mind, it would be logical to assume that the two forms of Gigantea are merely two different eco-types, the Burmese form representing the species as found in a cool climate without frosts and the Indian form representing the kind found in a cool climate with moderate frosts.

An article appearing in *The Gardener's Chronicle* dated March 4, 1905 tells the story of the flowering of this great species in Europe. The seeds of the species were first received in England in 1889 from Sir George King, then director of the Calcutta Botanical Garden. Attempts by well-known rosarians, including that great nurseryman George Paul and Mr. Leach, gardener to the Duke of Northumberland, to raise seedlings did



Although Sir George Watt (above) was the first discoverer of the species, the name R. gigantea as proposed by Henry Collett (1888), takes precedence because Watt's notes and proposed name were not published until 1892.

R. gigantea from The Genus Rosa Painted by Alfred Parsons in 1912 at the villa of Lord Brougham.

not succeed. But eventually, in 1898 Lord Henry Brougham had the satisfaction of seeing it bloom in his garden at Chateau Eléonore in Cannes, France. In a list of plants then in cultivation there, he mentions the plant as "having flowered in his garden for the first time in Europe last month" (He was unaware that the species had flowered in the Lisbon Botanic Garden in 1896). Lord Brougham described it as "a splendid plant making growth of 40 feet or more, the most desirable and by far the finest single rose I have ever seen. The bud is long but very closely resembles that of 'Madame Marie Lavalle,' and of a pure gold colour but the sun soon extracts the gold from the bloom."

Mr. Leach, gardener to the Duke of Northumberland in Albury Park Surrey, England, succeeded in 1903 in inducing the plant under cultivation in the duke's garden, to produce two flowers which were six inches across. This was the first flowering of the species in Britain. In February, 1904 the same specimen produced about a dozen flowers and in 1905 Mr. Leach had the satisfaction of seeing twenty-eight blooms on his plant, some of which were exhibited at the Royal Horticultural Society's show and secured for the exhibitor the Award of Cultural Commendation and a botanical certificate. Mr. Leach cultivated the plant in the Peach House of the duke's estate. The exhibited flowers were ivory white. Thereafter, the rose flowered in RBG Kew, London in 1910 and again repeated in 1912. There is a detailed description of the way in which the plant was trained in the Temperate House at Kew in the *Gardener's Chronicle* issue of May 11, 1912 from which we can gather the difficulties encountered in growing and inducing flowering under English conditions of this Himalayan rose.

What follows is the work of rose breeders in Europe to produce new kinds starting with the species. The focus of almost all this early work was creating plants which would flower early in the year in areas such as southern France, Spain, Italy and Portugal. In those days before the First World War, rich landowners in the colder parts of Europe, particularly Britain and northern France, had acquired vast properties where the climate was more benign in winter. They would shift their establishments to these houses and gardens, and naturally they expected to see flowers when they were in residence. *R. gigantea* hybrids were admirably suited for this purpose as they flowered early in the year.

In recent years many variant forms of *R. gigantea* have been discovered due to the explorations by Wang Guoliang and his associate Mr. Wang. More variants have been found by Zhengshi Jiang in his explorations in interior Chinese forests. We have not gone into detail on these collections as the focus of our talk is on man-made hybrids raised after M. Crépin accorded specific status to the species.

The first *R. gigantea* offspring were raised by Henri Cayeux, Paul Nabonnand, Jesse Busby (Lord Brougham's gardener) and others in Europe.

'Belle Portugais' - Photo courtesy Pinterest
Hybrid Gigantea bred by Henry Cayeux in 1903.

Left:
'Etoile du Portugal'
Photo by John & Becky Hook
Bred by Henry Cayeux in 1898

Right:
'La Follette'
Photo by Nicole Claudine Arboreau
Bred by Jesse Busby ca. 1900

Unfortunately, the incentive to continue breeding such roses disappeared when the life style of the rich altered dramatically after the First World War and the Great Depression. These early hybrids were likely bred using the Collett form of *R. gigantea*, but as this work stopped abruptly those that were bred were first generation F1 hybrids. If the work had continued to the next generation, we would have seen even more spectacular varieties, because of the combination of genes happening in the F2 generation and beyond. It appears that the only early hybrid raised from the Watt form of *R. gigantea* is the interspecies hybrid, 'Montecito,' raised by Dr. Francesco Francheschi.

Left: 'Emanuella de Mouchy' – Photo by John & Becky Hook; Bred by P. Nabonnand in 1922

Right: 'Montecito'
Photo by Madellena Picinini; Bred by Francesco Francheschi ca. 1913

Later work with *R. gigantea* started in an entirely different continent, in Australia, where the great breeder, Alister Clark raised many beautiful hybrids and some of these can still be seen in the Clark Memorial Garden at Bulla near Melbourne, and other gardens in Australia. One of his most popular Gigantea hybrids was 'Lorraine Lee,' so floriferous that on one occasion the entire fence of the Melbourne Race Course was decorated with flowers of this rose in a season when other roses were not available.

In the U.S., the pioneer was the Reverend George Schoener, whose devotion and energy resulted in the introduction of numerous Hybrid Giganteas, but his efforts were almost completely destroyed, first by a fire, and second, by a great storm which decimated the spectacular avenue of Hybrid Giganteas planted by him on the streets of Santa Barbara in California.

'Golden Vision' - Photo from Pinterest
Bred by Alister Clark ca. 1922

'Lorraine Lee' - Photo by Tasman Bay Roses
Bred by Alister Clark in 1924

'Feu Joseph Looymans' x R. gigantea hybrid

Photo courtesy Santa Clara University Library, Archives & Special Collections

Bred by Fr. George Schoener

'Manipur Magic' - Photo by Viru & Girija Viragaghavan
Bred by Viru ca. 2005
'Reve d'Or' x R. gigantea

The focus of this article is on the new hybrids raised by us in our garden in Kodaikanal, India. Kodaikanal is on a mountaintop on the Western Ghat mountains of southern India, at an altitude of 2200 m. It enjoys a tropical mountain climate, and is variously called 'the town of eternal spring' and 'an island in the sky'. Many hybrids have been raised utilizing the form of Gigantea from Mt. Sirohi in Manipur State in northeast India, the form collected by George Watt, which is a different eco-type geographically and at least marginally cold hardier. We collected seed of the species on our expedition in 1991, and from the many seedlings raised, we began our work.

'Sir George Watt'
'Reve d'Or' x R. gigantea

'Sir Henry Collett'
'Reve d'Or' x R. gigantea

'Tangkhul Treasure'
'Reve d'Or' x R. gigantea

Photos by Viru & Girija Viraraghavan
All introduced in 2008

We are proud that we have been able to raise hybrids from the species originally collected by us in the wild. It is likely that our hybrids are the only ones from the form of *R. gigantea* from Manipur unlike the other hybrids raised, which appear to be from the Collett collection in Myanmar.

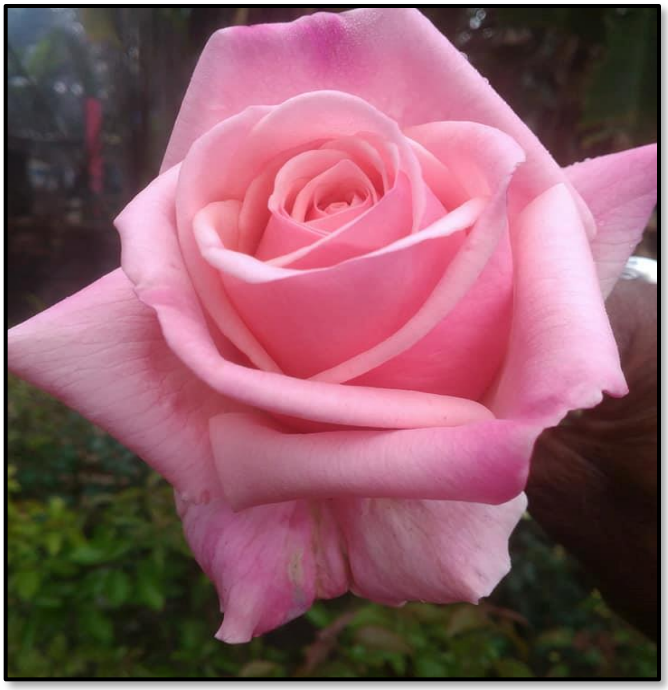
Two kinds of crosses were made, using *R. gigantea* as pollen parent. The first was with the Noisette climber 'Reve d' Or', which does well in India. Another approach was a leap in the dark. We noticed that the French Hybrid Tea 'Carmosine,' with large petaled blooms of pink and orange red, was well adapted to our climate, so crosses were made, and despite 'Carmosine' likely being a tetraploid, and Gigantea a diploid, we got some seedlings. This was a great step forward.

'Maebara's Dream'
'Carmosine' x R. gigantea
Introduced in 2013

'Frank Kingdon Ward'
'Carmosine' x R. gigantea
Introduced in 2012

'Evergreen Gene'
'Carmosine' x R. gigantea
Introduced in 2006

Photos by Viru & Girija Viraraghavan



Examples of Tea form among Viru's hybrids with R. gigantea ancestry.

Clockwise from upper left:

'Naga Belle' - Sh/HGig; Photo by Stephen Hoy

'Alister's Gift' - HGig; Photo by Robert Rippetoe

'Marie Cecilia Freeman' - HT/HGig; Photo by Viru & Girija Viraraghavan

'Churachand' - HT/HGig; Photo by Viru & Girija Viraraghavan

'Remembering Cochet' - Tea/HGig; Photo by Jeri Jennings

While creating these Gigantea climbers and shrubs, an interesting spin-off was the appearance of several seedlings with typical Tea rose characteristics. In retrospect, it is easy to see that this is what should have been expected, as *R. gigantea* is present in the background of standard Tea roses along with *R. chinensis spontanea*. Our new Tea roses have inherited, in many cases, the more robust growth of *R. gigantea*, as well as the disease resistance of the species. As contrasted with the earlier Teas, these have benefitted by *R. gigantea* being much more prominent in the breeding line.

Rose breeding like any other science is basically based on rationality but what is required are interludes of magic realism as the objective has always to be to create roses which are different but beautiful. In conclusion, we have been able to partially realize M. Crépin's dream of creating new roses utilizing *R. gigantea*. What of the future? As some of you may know, we have been working with a separate line based on *Rosa clinophylla*, probably the world's only really tropical rose species. We would like to inter-cross the two lines to create really warm climate roses, a project which, we would like to think, would have appealed to M. Crépin, as he had written extensively on this species too. As we conclude, we do feel that the spirit of the great taxonomist is present among us in this august gathering of rose lovers.

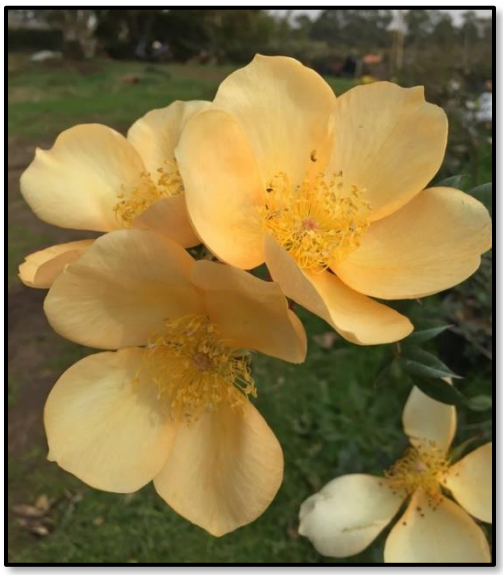
Clockwise from upper left:
'Dr. Malcolm Manners' - HGig; Photo by Stephen Hoy
'Helga's Quest' - HGig; Photo by Viru & Girija Viraraghavan
'Jay Hiers' - HGig/Sh; Photo by Viru & Girija Viraraghavan

"The rose that lives its little hour is prized beyond the sculptured flower."

William Cullen Bryant

From the Editor

I am thankful that the Viraraghavans have given me permission to reprint the text and photos from their recent presentation at the World Federation of Rose Society Heritage Rose Conference in Belgium. As you've already figured out, it focuses primarily on their work with *R. gigantea*, a native of India, Myanmar/Burma, and southwestern China. We are fortunate here in the US to have some of their hybrids commercially available. Several people deserve credit for making this happen. Robert Rippetoe propagated a number of them and initially shared them with Pat Henry and Bill Patterson of **Roses Unlimited**. Pam Greenewald of **Angel Gardens** and Art and Cydney Wade of **Rose Petals Nursery** also offer several. Dr. Malcolm Manners of Florida Southern College has been instrumental in growing a number of them to perfection in the beautiful Ruth's Rose Garden there at the college. Let's hope more of the great work being done by the Viraraghavans will become commercially available as rose growers become familiar with the scope of what is being accomplished in their breeding program.



'Amber Cloud' - HGig; repeat flo. climber

Viru & Girija Viraraghavan

Rose photos by Viru & Girija Viraraghavan; Conference photo by Dr. Malcolm Manners

'Sheenagh Harris' - HGig; 4', repeat flo.

'Karrie's Rose' - HGig; 10-12' repeat flo. climber

Left:
'Lanjique Rose'
4' HGig; Photo by Robert Rippetoe

Right:
'Emina'
4' HGig;
Photo by Rose Petals Nursery

Left:
'Out of India'
HGig/Sh; Photo by Viru & Girija Viraraghavan

Right:
'Aussie Sixer'
Tea/HGig; Photo by Viru & Girija Viraraghavan

Below: 'Mia Grondahl' - HGig; Photo by Viru &Girija Viraraghavan

Some other roses from the Viraraghavan breeding program!

Left: 'Pennar Nymph'
Part of their "Nymph" series; a new race of China roses crossed with R. clinophylla.

Right: 'Pat Henry'
Fragrant Shrub rose with R. clinophylla genes.
Photo by Christopher Huffer.

Left: 'Rose Legend' 'Akira Ogawa' in Japan.
A compact, reblooming hybrid involving R. laevigata rosea.

Right: 'Barbara Wood, Heart o'Roses'
The latest of their hand-painted roses.

Left: 'Rose Diamond Nagavajara'
A China rose created by crossing a native Thai rose with 'Mutabilis.'

Right: 'Salute to Graham'
A climbing China involving R. chinensis spontanea.

Singularly Beautiful Roses

Editor: Stephen Hoy – Warner Robins, GA – hoy127@cox.net

Please feel free to share this newsletter!

A newly published book by the Viraraghavans! Available by contacting Girija Viraraghavan via her Facebook page.
Mine is on the way!

A new HGig seedling!
'Ahimsa' x
('Winter Sunset' x 'Maebara's Dream')

The Viraraghavans have graciously and generously decided to name this seedling -

'Stephen's Dream'